DEPARTMENT OF ENVIRONMENTAL QUALITY PERMITTING and COMPLIANCE DIVISION MONTANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES)

Fact Sheet/Statement of Basis

Permittee: Montana Tunnels, Inc.

Permit No.: MT 0028428

Receiving Water: Pen Yan Creek

Facility Information:

Name Montana Tunnels Mine

Location 6 Miles West of Jefferson City Montana, within Sections 8, 9,

16 and 17 of Township 7 North, Range 4 West

Facility Contact: Mr. John Schaefer, Environmental Manager

P.O. Box 176

Jefferson City, MT 59638

(406) 933-8314

Fee Information:

Number of Outfalls 2 (for fee purposes)

Outfall – Type 001 – Mine Drainage and Storm Water

002 – Mine Drainage

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I. Permit Status

MPDES permit number MT0028428 was first issued in 1987 to Centennial Minerals, Inc. The Montana Tunnels Mine facility has been operating since 1986. The permit was renewed and reissued to Montana Tunnels Mining, Inc. in 1992 and 1997. The current permit authorizes discharge of storm water and mine drainage from Outfall 001. No mixing zone has been granted.

The current permit expired on October 31, 2002. The department received the permit renewal application for permit number MT0028428 on March 28, 2002. The application was determined to be complete on April 8, 2003 and the permit was administratively extended. The department received a modified renewal application on February 8, 2006, which included an additional outfall, Outfall 002. The modification application was determined to be complete on June 20, 2006.

The facility currently maintains Metal Mine Reclamation Act Operating Permit # 00113, and Montana Air Quality Permit # 1986.

II. Facility Information

A. Facility Description

The Montana Tunnels Mine is an open pit metal mine and flotation mill. The facility is located within sections 8, 9, 16 and 17 of Township 7 North, Range 4 West in Jefferson County. The facility employs a flotation mill process that uses cyanide in a separate closed circuit to produces silver, gold, and base metals concentrate from ore extracted from the mine pit.

The Outfall 001 structure consists of a spillway from the "Sedimentation Pond". The Sedimentation Pond is constructed within and across the Pen Yan Creek drainage. Above the Sedimentation Pond the Pen Yan Creek drainage collects run-off and seepage from disturbed areas within the mine site, reclaimed areas of the mine site, waste rock piles and roads (Attachment 1). The entire flow of Pen Yan Creek is captured by the Sedimentation Pond (Attachment 1). From the Sedimentation Pond the water reports tothe tailing facility seepage collection pond, via a stand-pipe drain within the Sedimentation Pond (Attachment 1). In case of a storm in excess of the 10 year 24 hour event the Sediment Pond would overflow through the Outfall 001 spillway to Pen Yan Creek (See Attachment 1.).

The tailing facility seepage collection pond is called the "South Pond" (Attachment 1). All water in the South Pond is used as makeup water for the milling operations. A series of three parallel over-flow culverts extend from the South Pond to an area within Pen Yan Creek drainage below a Historic Railroad Grade/Wagon Road Embankment (Attachment 1). The three over-flow culverts constitute Outfall 002. Sources of wastewater to the South Pond include discharge from the Sedimentation Pond via the

stand pipe, seepage collected from tailing facility under drain, run-off from the face of the tailing facility dam and pump-back from a monitoring/recovery well (Attachment 1).

In July of 2004 Montana Tunnels applied for a major amendment to its Operating Permit. The amendment includes a southerly expansion of the main waste rock dump, which would over-run the current Pen Yan Creek channel. The amendment proposal includes a realignment of Pen Yan Creek around the base of the expanded waste rock dump. The creek realignment would include an engineered channel that is 1440 feet longer than the current channel configuration using native materials from Wood Chute Flats alluvium. The realigned channel would ultimately connect and empty into the Sedimentation Pond at the presentlocation. (Montana Tunnels, 2006c)

B. Effluent Characteristics

Based on the flow line diagram and water balance submitted by the applicant (Montana Tunnels, 2006b), and in accordance with EPA guidance (1993), sources of potential wastewater reporting to Outfalls 001 and 002 are commingled waste streams classified as Storm Water and Mine Drainage.

The applicant provided an estimate of effluent quality for Outfall 001. This effluent characterization is based on water quality data gathered within Pen Yan Creek at monitoring station PY3, located up-gradient of the Sedimentation Pond. Flow in Pen Yan Creek above the Sedimentation Pond is ephemeral and infrequently reach the Sedimentation Pond. Similarly, the Sedimentation Pond rarely contains standing water and discharge from Outfall 001 has not been reported. However, in March 1996 the Sedimentation Pond was known to contain water. Analytical results from a sample taken during March 1996 indicate that actual concentrations of parameters within the Sedimentation Pond at that time were in most cases less than those from monitoring station PY3 except for pH, TSS and lead.

Ultimately, the effluent quality for Outfall 001 is difficult to quantitatively predict under the precipitation or hydrologic conditions that would cause the Sedimentation Pond to discharge from the spillway. The analytical data for potential parameters of concern from the March 1996 sampling and that submitted on the application are summarized in Table 1.

The applicant also provided analytical data from the South Pond as a representative estimate of effluent quality for Outfall 002. Analytical data for potential parameters of concern for Outfall 002 are summarized in Table 1.

No WET testing data or biological monitoring or sampling has been conducted at the facility.

Table 1: Estimated Effluent Characteristics for Outfalls 001 and 002.							
Parameter	Location	Units	Previous Permit Limit	Minimum Value	Maximum Value	Average Value	Number of Samples
Flow, Daily Average	Outfall 001	mgd	(1)	0	0	0	NA
	Outfall 002	mgd	(1)	0	0	0	NA
рН	Outfall 001	s.u.	6 to 9/ ⁽²⁾	7.23	8.13	7.54	6
	Outfall 002	s.u.	NA	7.3	8.6	7.89	19 ⁽³⁾
Specific Conductivity	Outfall 001	umhos/cm	(1)	251 ⁽⁴⁾	697	565	6
Specific Colladelivity	Outfall 002	umhos/cm	NA	481	1110	758	19 ⁽³⁾
Total Handard Carro	Outfall 001	mg/L	(5)	266	340.2	310.0	5
Total Hardness as CaCO ₃	Outfall 002	mg/L	NA	198	506	361	18 ⁽³⁾
A Ilrolimiter	Outfall 001	mg/L	(5)				0
Alkalinity	Outfall 002	mg/L	NA	53	130	100	19 ⁽³⁾
Oil and Grease	Outfall 001	mg/L	15/(2)			-	0
On and Grease	Outfall 002	mg/L	NA				0
Total Dissolved Solids	Outfall 001	mg/L	(5)	201 ⁽⁴⁾	201 ⁽⁴⁾	201 ⁽⁴⁾	1
Total Dissolved Solids	Outfall 002	mg/L	NA	335	852	598	19 ⁽³⁾
Total Suspended Solids	Outfall 001	mg/L	30/20 ⁽²⁾	30	88 ⁽⁴⁾	53.3	3
(TSS)	Outfall 002	mg/L	NA				0
Nitrate plus Nitrite as	Outfall 001	mg/L	(5)	< 0.01	0.17	< 0.05	4
Nitrogen	Outfall 002	mg/L	NA	0.03	0.68	0.33	19 ⁽³⁾
Total Cumida	Outfall 001	mg/L	(5)				0
Total Cyanide	Outfall 002	mg/L	NA	< 0.005	< 0.005	< 0.005	8 ⁽⁶⁾
Total Recoverable Arsenic	Outfall 001	mg/L	0.29/ ⁽²⁾	$0.132^{(4)}$	0.835	0.491	4
	Outfall 002	mg/L	NA	< 0.003	0.006	< 0.0034	19
Total Recoverable Barium	Outfall 001	mg/L	(5)				0
	Outfall 002	mg/L	NA	0.027	0.057	0.038	8 ⁽⁶⁾
Total Recoverable Cadmium	Outfall 001	mg/L	0.004/	$0.0066^{(4)}$	0.0228	0.0132	4
	Outfall 002	mg/L	NA	< 0.0001	0.0011	< 0.0005	19
T . 15	Outfall 001	mg/L	0.01/ ⁽²⁾	0.0151 ⁽⁴⁾	0.054	0.031	4
Total Recoverable Copper	Outfall 002	mg/L	NA	< 0.001	0.061	< 0.009	19 ⁽³⁾
Total Recoverable Iron	Outfall 001	mg/L	(6)	0.742	8.84	4.51	4
	Outfall 002	mg/L	NA	0.04	0.38	0.14	19 ⁽³⁾
Total Recoverable Lead	Outfall 001	mg/L	0.05/ ⁽²⁾	0.018	$0.035^{(4)}$	0.03	4
	Outfall 002	mg/L	NA	< 0.003	0.009	< 0.004	19 ⁽³⁾
Total Recoverable	Outfall 001	mg/L	(5)	0.257 ⁽⁴⁾	3.68	2.24	4
Manganese	Outfall 002	mg/L	NA	0.023	1.97	0.676	19 ⁽³⁾
Total Dagovarahla Zina	Outfall 001	mg/L	0.12/(2)	$0.265^{(4)}$	7.05	3.63	4
Total Recoverable Zinc	Outfall 002	mg/L	NA	0.01	0.26	0.08	19 ⁽³⁾

Footnotes:

- (1) No limit in previous permit; monitoring requirement only.
- (2) Instantaneous or Daily Maximum/30 day average.
- (3) All data points are from 2001 2005 dataset for South Pond.
- (4) Individual data point is from March 1996 analytical result from sample taken from Sedimentation Pond.
- (5) No monitoring or effluent limit in previous permit.
- (6) All data points are from 1996-1997 dataset for South Pond, data set used when more recent data was not available.

C. Current Permit Limits and Compliance History

The current permit includes effluent limits at Outfall 001 for Total Suspended Solids (TSS), Oil and Grease (O&G), Arsenic, Cadmium, Copper, Lead, Zinc, pH and toxicity. TSS limits are technology-based, best practicable control technology (BPT), O&G limits are based on the water quality standard, and arsenic and metals limits are based on no additional degradation of background water quality that historically has not met surface water quality standards.

As discussed above in Section II.B., no discharge has been reported from Outfall 001 since inception of the permit in 1987. The department conducted compliance evaluation inspections at the facility on September 23, 1997, May 12, 2000, April 15, 2003, and October 26, 2005, no violations were noted. Neither the current nor previous permits have contained a compliance schedule.

III. Rationale for Technology-Based Effluent Limits

The Montana Board of Environmental Review, at ARM 17.30.1207(1), has adopted by reference 40 CFR Subchapter N, which is a series of federal agency rules setting forth effluent limitations for existing point source dischargers and standards of performance for new point source dischargers discharging into state waters.

Montana Tunnels Mine extracts and mills gold, silver, lead and zinc ores. Discharges of mine drainage and process water from facilities within the copper, lead, zinc, gold, silver and molybdenum ore mining and dressing industrial subcategory are subject to the technology-based effluent limits (TBEL) 40 CFR 440 Subpart J. These TBELs are based on best practicable control technology (BPT), best available technology (BAT), and the best available demonstrated technology (BADT), also called new source performance standards (NSPS). BPT and BAT are applicable to any existing facility and the BADT-NSPS are applicable to any new source.

A new source is defined as any building, structure, facility or installation from which there is or may be the discharge of pollutants, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance under section 306 of the Clean Water Act (CWA) which will be applicable to such source if such standard is thereafter promulgated in accordance with section 306 of the Act (40 CFR 401.11(e), ARM 17.30.1304(37)(a)). Both BAT and BADT-NSPS were promulgated by EPA pursuant to section 306 of the CWA on December 3, 1982 (FR, Vol. 47, No. 233). Outfalls 001 and 002 were constructed in 1987; therefore, both outfalls are new sources and subject to NSPS effluent limit guidelines at 40 CFR 440.104. The NSPS at 40 CFR 440.104(a) allow discharge from these outfalls in accordance with the BADT effluent limits presented in Table 2.

Table 2: New Source Performance Standards Effluent Limit Guidelines					
Parameter	Units	Effluent Limitation			
		Maximum Daily Limit	Average Monthly Limit		
pН	s.u.	6 to 9	6 to 9		
Total Suspended Solids	mg/L	30.0	20.0		
Total Recoverable Copper	mg/L	0.30	0.15		
Total Recoverable Zinc	mg/L	1.5	0.75		
Total Recoverable Lead	mg/L	0.6	0.3		
Total Recoverable Mercury	mg/L	0.002	0.001		
Total Recoverable Cadmium	mg/L	0.10	0.05		

IV. Rationale for Water Quality-Based Effluent Limits

Permits are required to include water quality-based effluent limits (WQBEL) when technology based effluent limits are not adequate to protect state water quality standards (40 CFR 122.44 and ARM 17.30.1344). ARM 17.30.637(2) states that no wastes may be discharged and no activities conducted such that the wastes or activities, will violate, or can reasonably be expected to violate, any of the standards. Montana water quality standards (ARM 17.30.601 *et seq.*) define both water use classifications for all state surface waters and numeric and narrative standards that protect those designated uses. New or increased sources, as defined in ARM 17.30.702(18), are subject to Montana Nondegradation Policy (75-5-303, MCA) and regulations (ARM 17.30.701 *et seq.*).

A. Receiving Water

Montana Tunnels, Inc. mine facility discharges to an unnamed tributary to Spring Creek called Pen Yan Creek (USGS, 1995). Pen Yan Creek confluences with Spring Gulch approximately ¼ mile downstream of Outfall 002 to form Spring Creek. The receiving water is classified as B-1 according to Montana Water Use Classifications, ARM 17.30.610(1)(a).

The water discharged from the Outfalls must not cause or contribute to an excursion from the applicable water quality standards, must meet the general treatment standards and other requirements incorporated by reference at ARM 17.30.637(5) and (6), see Section IV B 1. for a more complete description of applicable water quality standards.

Pen Yan Creek is located within the Upper Missouri watershed as identified by USGS Hydrological Unit Code (HUC) 10030101, at this time Pen Yan Creek has not been assigned a Montana water body identification or stream segment number; as such, it has not been assessed as to whether it supports its designated beneficial uses. Therefore, it is not listed on the 1996 or 2006 303d list.

The 1985 draft EIS adopted by the department on January 31, 1986 indicates the long term mean flow for Pen Yan Creek was estimated to be 0.4 cubic feet per second (cfs) (180 gpm). The applicant submitted a narrative characterization of Pen Yan Creek

flows, based on 20 years of qualitative observations of Pen Yan Creek. Within the applicant's description, Pen Yan Creek is discretized into 6 different reaches named Section A through F (Montana Tunnels, 2006c). Based on the Applicant's summary of the quality and quantity of water within these stream segments observed over the last 20 years the receiving water at the points of discharge for Outfalls 001 and 002 is ephemeral and dewatered (Montana Tunnels, 2006c).

Based on the applicant's characterizing information Pen Yan Creek in the vicinity of the discharges is not high quality water pursuant to Montana's Nondegradation Policy because it has zero flow or surface expression for more than 270 days during most years from 1987 to 2006 (75-5-103(10)(b)(ii), MCA).

B. Proposed WQBEL

1. Applicable Standards

The preceding section establishes that the reach of Pen Yan Creek that may receive discharge from the project is within an ephemeral reach of a B-1 state water. The permit application materials indicate that the facility's normal mill operation results in a net negative water balance (Montana Tunnels, 2006b) and thus continuous discharge from Outfalls 001 and 002 is not expected.

ARM 17.30.637(6) states that ephemeral streams are not subject to the specific water quality standards of 17.30.620 through 17.30.629, but are subject to the General Treatment Standards (ARM 17.30.635(2) and (3)) and General Prohibition (ARM 17.30.637), as well as the provisions of ARM 17.30.640 (mixing zones), 641 (sampling methods in accordance with 40 CFR 136), 645 (radiological criteria), and 646 (bioassays).

The General Treatment Standard at ARM 17.30.635(3) establishes that the degree of waste treatment required for discharges of industrial waste shall, at minimum, be treatment capable of achieving effluent quality equivalent to technology-based BPT effluent limit guidelines, as defined at 40 CFR Subchapter N (see discussion in Section III for definition of BPT).

Other applicable water quality standards at ARM 17.30.637 require that state surface waters must be free from substances attributable to municipal, industrial, agricultural practices or other discharges that will:

- Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
- Create floating debris, scum, a visible oil film (or be present in concentrations at or in excess of 10 milligrams per liter) or globules of grease or other floating materials;
- Produce odors, colors or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible;

- Create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; or
- Create conditions which produce undesirable aquatic life.

Finally, the receiving water, at the points of discharge, is not high quality state water as defined at 75-5-103(10)(b)(ii) because flow is not present for more than 90 days per year. Therefore, the water quality standards within the Montana Nondegradation Policy do not apply to Pen Yan Creek at Outfall 001 or 002 (75-5-303(1), MCA, ARM 17.30.701(1), and ARM 17.30.705(1)) (See Section IV.A.).

2. Proposed Limits

Existing water quality based effluent limits assigned to the Sedimentation Pond spillway (Outfall 001) are based on no further degradation. However, it has been established in Section IV.B.1. that the receiving water is not high quality state water; therefore, Montana's Nondegradation Policy does not apply. Accordingly, it is proposed pursuant to the antibacksliding exception at 402(o)(2)(ii) of the Federal Clean Water Act that the previous effluent limits for Outfall 001 be replaced with the WQBEL that is based on the applicable water quality standards.

As discussed in Section IV.B.1. the specific water quality standards at ARM 17.30.623 do not apply; rather, the minimum treatment standards of 40 CFR Subchapter N, Subpart J are adopted as being sufficiently protective of water quality for ephemeral and dewatered reaches of stated surface water. Therefore, in accordance with ARM 17.30.637(5) and (6) the applicable and proposed water quality based effluent limits for Outfall 001 and Outfall 002 include those at ARM 17.30.637 (listed previously) and the BPT effluent limit guidelines at 40 CFR 440.102, as they are invoked as a water quality based effluent treatment standard at ARM 17.30.635(3).

The Sedimentation Pond (Outfall 001) is designed to retain the run-off from the 10 year 24 hour precipitation event (Montana Tunnels, 2006b); therefore, any discharge from this outfall will be consistent with the ephemeral nature of the receiving water. However, to maintain the ephemeral nature of the receiving water in the area of Outfall 002, whereby validating the WQBEL proposed in this permit as being based on water quality standards for ephemeral state waters, it is proposed that authorized discharges shall not exceed a total of 90 days per calendar year. Discharge in excess of 90 day per calendar year may create high quality state water within Pen Yan Creek that would be subject to Montana's Nondegradation Policy, whereby a different set of water quality standards would apply to the receiving water resulting in different effluent limits within the permit. Therefore, it is proposed that continuous discharge in excess of 90 days per calendar year from Outfall 002 as a result of mill and/or tailing impoundment drain-down is not authorized by this permit.

V. Final Effluent Limits

The proposed final effluent limits are a combination of the more stringent of the technology-based and water quality based effluent limits as developed in Section III and IV. It has been determined that applicable TBEL are the NSPS at 40 CFR 440.104. These effluent limits are more stringent than the applicable WQBEL established in accordance with the applicable Montana water quality standard for ephemeral state waters, which ultimately reverts to the BPT TBEL at 40 CFR 440.102. Therefore, the proposed final numeric effluent limits applicable to discharges to Pen Yan Creek from Outfalls 001 and 002 are the more stringent TBEL NSPS presented in Table 3.

Table 3. Proposed Final Effluent Limits for Outfall 001 and 002.					
Parameter	Units	Effluent Limitation			
		Maximum Daily Limit	Average Monthly Limit		
pН	s.u.	6 to 9	6 to 9		
Total Suspended Solids	mg/L	30.0	20.0		
Total Recoverable Copper	mg/L	0.30	0.15		
Total Recoverable Zinc	mg/L	1.5	0.75		
Total Recoverable Lead	mg/L	0.6	0.3		
Total Recoverable Mercury	mg/L	0.002	0.001		
Total Recoverable Cadmium	mg/L	0.10	0.05		

In addition to the limits in Table 3, any discharges from Outfall 001 and 002 shall not:

- Settle to form objectionable sludge deposits or emulsions beneath the surface of the water or upon adjoining shorelines;
- Create floating debris, scum, a visible oil film, be present in concentrations at or in excess of 10 milligrams per liter, or form globules of grease or other floating materials;
- Produce odors, colors or other conditions as to which create a nuisance or render undesirable tastes to fish flesh or make fish inedible;
- Create concentrations or combinations of materials which are toxic or harmful to human, animal, plant or aquatic life; or
- Create conditions which produce undesirable aquatic life.

Finally, the duration of discharge from Outfall 002 shall not exceed 90 days per calendar year.

VI. Monitoring Requirements

A. Effluent Monitoring

The permittee shall be required to monitor all discharges from Outfall 001 at the Sedimentation Pond Spillway outlet to Pen Yan Creek and Outfall 002 at the end of the culverts emptying from the South Pond to the creek bed for the parameters listed in Table 4. Sampling shall be conducted at minimum, on a monthly, frequency during any discharge event. If no discharge occurs during any calendar month, no effluent sampling is required.

In addition to monitoring for constituents with effluent limits, monitoring is required for (1) total hardness to determine applicable metal standards for the effluent, (2) Nitrate + Nitrite as Nitrogen monitoring is required to assess if residual nutrients are present from blasting activity, (3) cyanide monitoring is required because cyanide is used within the milling process, (4) arsenic monitoring is required because it is known to be present in the receiving water and local environment, and (5) selenium and thallium monitoring is required because the presence and concentration of these parameters has not been quantified in the application materials.

Parameter	Unit	Sample Frequency	Sample Type ¹	RRV
Total Suspended Solids	mg/L	Monthly	Grab	10
Oil and Grease	mg/L	Monthly	Grab	1
рН	s.u.	Monthly	Grab	0.1
Total Hardness as CaCO ₃	mg/L	Monthly	Grab	NA
Nitrate + Nitrite as Nitrogen	mg/L	Monthly	Grab	0.01
Total Cyanide	mg/L	Monthly	Grab	0.005
Total Recoverable Arsenic	mg/L	Monthly	Grab	0.003
Total Recoverable Cadmium	mg/L	Monthly	Grab	0.00008
Total Recoverable Copper	mg/L	Monthly	Grab	0.001
Total Recoverable Lead	mg/L	Monthly	Grab	0.0005
Total Recoverable Mercury	mg/L	Monthly	Grab	0.00001
Total Recoverable Selenium	mg/L	Monthly	Grab	0.001
Total Recoverable Thallium	mg/L	Monthly	Grab	0.0002
Total Recoverable Zinc	mg/L	Monthly	Grab	0.01

B. Whole Effluent Toxicity (WET) Requirements

Starting in the first calendar quarter following the effective date of the permit, the permittee shall, at least once each quarter conduct an acute static replacement toxicity test on a composite/grab sample of the effluent. Testing will employ two species per quarter and will consist of 5 effluent concentrations (100, 50, 25, 12.5, 6.25 percent effluent) and a control. Dilution water and the control shall consist of the receiving water. Samples shall be collected on a two day progression; i.e., if the first quarterly sample is on a Monday, the second quarter sample shall be on a Wednesday, etc. Saturdays, Sundays and Holidays will be skipped in the progression.

The static toxicity tests shall be conducted in general accordance with the procedures set out in the latest revision of Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms, EPA-600/4-90/027 and the "Region VIII EPA NPDES Acute Test Conditions-State Renewal Whole Effluent Toxicity". The permittee shall conduct an acute 48-hour static renewal toxicity test using *Ceriodaphnia sp.* and an acute 96-hour static renewal toxicity test using fathead minnows (*Pimephales promelas*) as the alternating species. The control of pH in the toxicity test utilizing CO2 enriched atmospheres is allowed to prevent rising pH drift.

The target pH selected must represent the pH value of the receiving water at the time of sample collection.

Acute toxicity occurs when 50 percent or more mortality is observed for either species at any effluent concentration. If more than 10 percent control mortality occurs, the test is considered invalid and shall be repeated until satisfactory control survival is achieved, unless a specific individual exception is granted by the Department. This exception may be granted if less than 10 percent mortality was observed at the dilutions containing high effluent concentrations.

If acute toxicity occurs in a routine test, an additional test shall be conducted within 14 days of the date of the initial sample. Should acute toxicity occur in the second test, testing shall occur once a month until further notified by the Department. In all cases, the results of all toxicity tests must be submitted to the Department in accordance with Part II of this permit.

The quarterly results from the laboratory shall be reported along with the Discharge Monitoring Report (DMR) form submitted for the end of the reporting calendar quarter (e.g., whole effluent results for the reporting quarter ending March 31 shall be reported with the March DMR due April 28th with the remaining quarterly reports submitted with the June, September, and December DMR's). The format for the laboratory report shall be consistent with the latest revision of Region VIII Guidance for Acute Whole Effluent Reporting, and shall include all chemical and physical data as specified.

If the results for four consecutive quarters of testing indicate no acute toxicity, the permittee may request a reduction to quarterly acute toxicity testing on only one species on an alternating basis. The Department may approve or deny the request based on the results and other available information without an additional public notice. If the request is approved, the test procedures are to be the same as specified above for the test species.

C. Toxicity Reduction Evaluation / Toxicity Identification Evaluation Should acute toxicity be detected in the required resample, a TIE-TRE shall be undertaken by the permittee to establish the cause of the toxicity, locate the source(s) of the toxicity, and develop control or treatment for the toxicity. Failure to initiate or conduct an adequate TIE-TRE, or delays in the conduct of such tests, shall not be considered a justification for noncompliance with the whole effluent toxicity limits contained in Part I.B of this permit. A TRE plan needs to be submitted to the Department within 45 days after confirmation of the continuance of effluent toxicity (resample).

VII. Nonsignificance Determination

The department has determined pursuant to 75-5-303, MCA that the proposed action will not cause significant degradation of water quality because the receiving water are not high quality state water.

VIII. Other Information

On September 21, 2000, a U.S. District Judge issued an order stating that until all necessary total maximum daily loads (TMDLs) under Section 303(d) of the Clean Water Act are established for a particular water quality limited segment (WQLS), the State is not to issue any new permits or increase permitted discharges under the MPDES program. The order was issued in the lawsuit <u>Friends of the Wild Swan v. U.S. EPA. et al.</u>, CV 97-35-M-DWM, District of Montana, Missoula Division. The DEQ finds that the issuance of this permit does not conflict with the order, because: 1) the proposed discharge is not a new or increased source, and 2) the receiving water body is not on the 1996 or 2006 303(d) list as impaired.

IX. Information Source

Administrative Rules of Montana, 17.30.601 et seq., "Montana Surface Water Quality Standards and Procedures", June 30, 2004.

Administrative Rules of Montana, 17.30.701 et seq., "Nondegradation of Water Quality", June 30, 2004.

Administrative Rules of Montana, 17.30.1201 et seq. and 17.30.1301 et seq., "Montana Pollutant Discharge Elimination System", March 31, 2006

Code of Federal Register, Title 40, Chapter I, "Environmental Protection Agency", Subchapter D and N, 2006.

EPA, Correspondence from Dana Allen, "RE: NPDES Permit Writing Guidance for Mines", w/enclosures, May 21, 1993.

Clean Water Act, 33 United States Code 1251 et seg., 2002.

Montana Tunnels, 2006b "RE: Deficiency response for Montana Pollutant Discharge Elimination System (MPDES) Permit #MT0028428 Renewal/Modification Application", Correspondence dated March 16, 2006, on-file at the department in Permit Renewal Application

Montana Tunnels, 2006c, "RE: Second deficiency response for Montana Pollutant Discharge Elimination Sytem (MPDES) Permit #MT0028428 Renewal/Modification Application", Correspondence date June 14, 2006, on-file at the department in Permit Renewal Application

Montana Code Annotated, Title 75-5-101 et seq., "Montana Water Quality Act", 2003

Schaefer, John, Environmental Manager Montana Tunnels, Inc., personal communication, January 3, 2007.

United States Geologic Survey, 7.5 Minute Quadrangle Series, "Wickes" Montana, 1995

Attachment 1: Water Balance and Flow Line Diagram.

